

AIM Ann Report
1874

REPORT

OF THE

AUCKLAND INSTITUTE

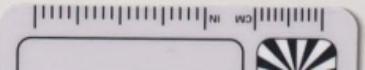
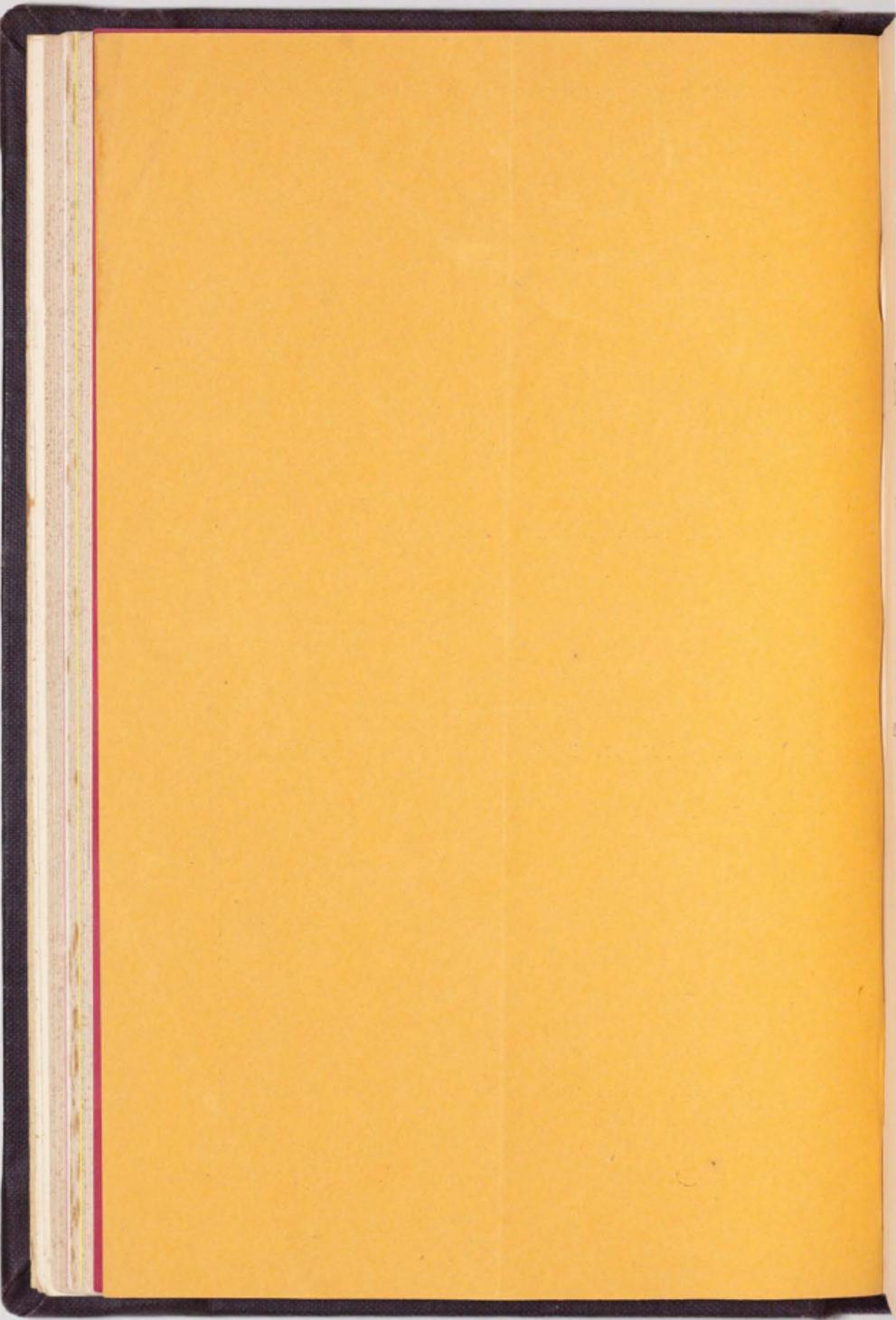
FOR THE YEAR ENDING FEBRUARY 16, 1874.

ADOPTED AT THE ANNUAL MEETING HELD FEBRUARY 16, 1874.

AUCKLAND :

PRINTED BY W. C. WILSON, AT HIS STEAM PRINTING
ESTABLISHMENT, WYNDHAM STREET.

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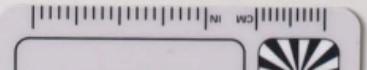
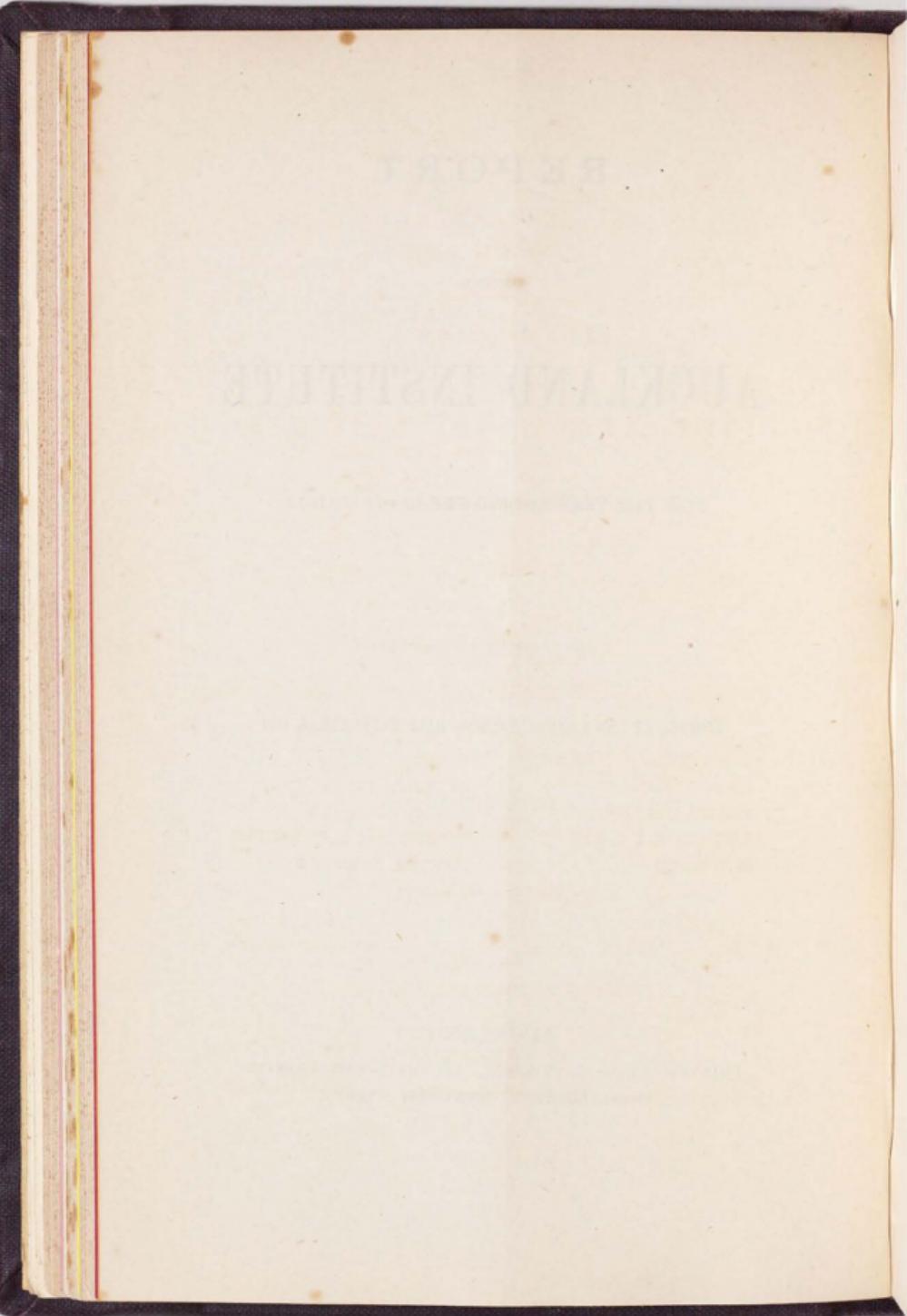
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O F F I C E R S

OF

THE AUCKLAND INSTITUTE.

CO U N C I L.

President:

SIR G. A. ARNEY,
CHIEF JUSTICE OF NEW ZEALAND.

CAMPBELL, J. L., Esq., M.D.

FIRTH, J. C., Esq.

GILLIES, T. B., Esq.

GOODALL, J., Esq., C.E.

HAY, D., Esq.

HEALE, T., Esq.

HAULTAIN, THE HON. COL.

KINDER, REV. J., D.D.

PURCHAS, REV. A. G., M.R.C.S.E.

STEWART, J., Esq., C.E.

TINNE, T. F. S., Esq.

Secretary:

THOMAS F. CHEESEMAN, Esq., F.L.S.

Auditor:

C. TOTHILL, Esq.

AIM Ann Report 1874

The following Magazines and Periodicals are circulated amongst the Members:—

Quarterly Journal of Microscopical Science.
Quarterly Journal of Science.
Popular Science Review.
Nature.
Geological Magazine.
Lancet.
Art.
The Academy.
The Garden.
Botanical Magazine.
Gardener's Chronicle.
Chemical News.
Engineering.
Iron.
Art.
Journal of Botany.
Science, Gossip, &c. &c.

WINTER SESSION, 1874.

Meetings will be held on the following Monday Evenings:—

MAY 4.
JUNE 1.
JUNE 29.

JULY 27.
AUGUST 24.
SEPTEMBER 21.

OCTOBER 26.

To commence at 7.30 p.m.

Extract from the Rules.

1. Any person desiring to become a member of the Institute, shall be proposed in writing by two members, and shall be balloted for at the next meeting of the Council.
3. New members on election to pay one pound one shilling entrance fee, in addition to the usual subscription of one pound one shilling, the annual subscriptions being payable in advance on the first day of April for the then current year.
4. Members may at any time become Life-members by one payment of ten pounds ten shillings, in lieu of future annual subscriptions.

REPORT.

THE Council of the Auckland Institute, in presenting their Report for the past year, have pleasure in stating that the general interest evinced in the progress of the Institute has undergone no abatement, while the number of new members is greater than in any previous year; and although the serious disadvantage under which the Institute labours from the want of suitable buildings has not been removed, yet in other respects the Council are able to give a favourable account of the interests committed to their charge.

During the year six meetings have been held, at which the following papers were read, most of which will be printed in the next volume of the "Transactions of the New Zealand Institute":—

1. Introductory Address:—by the PRESIDENT.
2. On the Geological Structure of the Thames Gold-field:—by Capt. F. W. Hutton, F.G.S., C.M.Z.S.
3. Analysis of the Thames Water Supply—from the Colonial Laboratory:—communicated by the PRESIDENT.
4. On the New Zealand Species of *Cheilanthes*:—by T. KIRK, F.L.S.
5. On Bastian's recent work on Spontaneous Generation:—by T. HEALE.
6. On Cosmography:—by J. LEITH.
7. On the Reclamation of Sand Wastes:—J. STEWART, C.E.

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8. On Induction and Necessary Truth :—by the Rev. R. KIDD, L.L.D.
9. On an Economical method of Felting Steam Boilers :—by J. C. FIRTH.
10. Notes on the Reclamation of Sand Wastes :—by T. KIRK, F.L.S.
11. Report on a series of Rock Specimens from the Tokatea Tunnel :—by Dr. HECTOR, F.R.S.
12. On the probability of a Water Supply being obtained from Mount Eden :—by J. GOODALL, C.E.
13. On the Easy Prediction of Occultations and Eclipses :—by T. HEALE.
14. Further Notes on the probability of obtaining a Water Supply from Mount Eden :—by J. GOODALL, C.E.
15. Notes on the same :—by J. STEWART, C.E.
16. Description of a new species of Cordyline :—by T. KIRK, F.L.S.

17. Notes on Indigenous materials suitable for the manufacture of Paper :—by T. KIRK, F.L.S.

The Museum and Library have been well frequented by the public, and the donations have been numerous and valuable, as may be seen from the appended list. Special thanks are due to Mr. T. Kirk, F.L.S., for a series of Wood Sections, New Zealand Shells, a collection of British Ferns, and other valuable additions.

The Council regret that on account of the inadequate amount of space at their disposal, it has not been possible to make better arrangements for exhibiting the various objects for the purposes of study and reference. The collection of Type Minerals continues to attract a large number of visitors, as does the collection of Native Birds.

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It is intended to mount and re-arrange in a more convenient manner the copious collection of New Zealand Shells now in the Museum.

The scientific value of the annual volume of "Transactions" is so generally admitted, that little reference need be made to it here. The fifth volume has been duly received, and supplied free of cost to the members. The sixth volume is now in the press, and will probably be issued in the course of a few months.

At the end of the year, Mr. T. Kirk, F.L.S., Secretary and Treasurer to the Society, resigned his office, in consequence of having accepted an appointment as Lecturer on Natural Science to the Wellington College. The Council would here place on record their appreciation of the services rendered by him to the Institute during the last six years. But for his unwearied exertions and constant attention to the affairs of the Society, it could not have attained its present amount of success. The Council feel that his removal will be a serious loss, not only to the Institute, but also to the Province.

The want of suitable buildings for the Museum and Library, referred to in the Reports of previous years, is the great drawback to the progress of the Institute, and the one which must be removed before any substantial advance can be made. Considering the importance attached in all civilized countries to Public Museums and Libraries, not only as sources of rational enjoyment, but as educational institutions, promoting a love for science, the Council earnestly hope that means may, ere long, be devised for providing the accommodation so urgently required; and that the Institute will continue to receive that liberal support from the Public which is due to an Institution whose chief aim is to secure the advancement of knowledge, and the diffusion of scientific and practical information throughout the community.

THE TREASURER IN ACCOUNT WITH THE AUCKLAND INSTITUTE.

Dr.

MAY 17TH, 1873, TO JANUARY 13, 1874.

Cs.

	£ s. d.	£ s. d.
To Balance in Bank of New Zealand, May 19th, 1873	51 19 11	By Books and Periodicals
" Entrance Fees and Subscriptions	232 1 0	" Additions to Museum
" Rents	29 12 0	" Museum Requisites, Printing, Advertisements, &c.
" Books, &c., sold	9 9 6	" Insurances
" Donation from T. Heale, Esq., (Arbitration Fee)	5 5 0	" Curator
" Prizes awarded at Market Exhibition	4 0 0	" Transfers to Building Fund
" Interest allowed on Investment Account	0 8 10	Donation, T. Heale, Esq.
" Interest allowed on Building Fund Account	0 10 0	Prizes at Market Exhibition
	£333 6 3	Interest on Building Fund Account
		9 15 0
		" Interest carried to Investment Fund Account
		0 8 10
		" Balance in Bank of New Zealand, February 13th, 1874
		107 5 0
		£333 6 3

BUILDING FUND ACCOUNT.

	£ s. d.	£ s. d.
To Cash in Auckland Savings Bank, May 19th, 1873	10 0 0	By Cash in Auckland Savings Bank, February 13th, 1874
" Donation from T. Heale, Esq., (Arbitration Fee)	5 5 0	19 15 0
" Prizes awarded at Market Exhibition	4 0 0	
" Interest to January 1st, 1874	0 10 0	
	£19 15 0	£19 15 0

INVESTMENT FUND ACCOUNT.

	£ s. d.	£ s. d.
To Cash in New Zealand Savings Bank, May 19th, 1873	11 4 8	By Cash Deposited in Auckland Savings Bank
" Interest to January 15th, 1874	0 8 10	11 13 6
	£11 13 6	£11 13 6

Audited and found correct,

CHARLES TOTHILL,

THOMAS F. CHEESEMAN,

TREASURER.

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ADDITIONS AND DONATIONS TO THE LIBRARY AND MUSEUM.



Report of the Geological Survey of New Zealand for 1872—1873 ; Catalogue of the Marine Mollusca of New Zealand ; Catalogue of the New Zealand Land Shells ; Critical List of the New Zealand Shells, by Dr. Von Marten ; Catalogue of the Tertiary Fossils of New Zealand.—The Director of the Geological Survey.

New Zealand University Calendar for 1873 and 1874.

Parliamentary Papers and Reports ; New Zealand Hansard for 1873.

—The Colonial Secretary.

Votes and Proceedings of the Provincial Council of Otago.—The Superintendent of Otago.

Four sets Chinese Drawing Copies, with printed instructions in Chinese characters.—Major Green.

New Zealand Hansard for 1870 ; One volume Natural History.—The Hon. Colonel Hautain.

Principles and Practice of Surveying.—T. Heale.

Description of some new species of New Zealand Ferns, by W. Colenso.—E. B. Dickson.

Swift's Works, 5 volumes.—M. Kew, Epsom.

Transactions and Proceedings of the Zoological Society of London.—Purchased.

History of the Birds of New Zealand, by Dr. Buller.—Purchased.

Iron Pyrites with Fossils.—T. B. Gillies.

Fossil Shells from Kawa Kawa, East Cape ; Coal with Fossils.—The Ven. Archdeacon H. L. Williams.

Kaolin, crude and refined, St. Austell.—J. Fairburn, C.E.

Galena with Blende, Silicified Wood, Silicate of Alumina.—J. Stephens, Thames.

Coal, Raglan.—The Hon. H. Chamberlin

Skin of Bittern —J. Jones, Little Muddy Creek.

Skins of Larus dominicanus and L. scopulinus.—Rev. A. G. Purchas. M.D.

Skins of Ocydromus fuscus, Glancopis cinerea, and Prion Banksii.—The Director of the Colonial Museum.

Specimen of the White Crane, set up.—The Director of the Canterbury Museum.

Skins of Himantopus leucocephalus and Ardea sacra.—W. J. Cheeseman.

Three Kiwi Eggs.—J. Webster, Hokianga.

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Sword Fish, (Xiphias sp.)—T. Jenkins.

Three Native Fishes.—T. W. Kirk.

Three Native Fishes.—Rev. A. G. Purchas, M.D.

Moriori Crania and remains; Lower Jaw of Orcas sp.; Upper Jaw of Ziphiid Whale.—G. Ritchie, Chatham Islands.

Cranium of Monkey.—T. Walker.

Freshwater Shrimps.—Major Mair.

Freshwater Shrimps, Domain.—T. Kirk, F.L.S.

Marine Crabs.—J. Stewart, C.E.

British Crabs.—H. Arthur.

Medusæ, collected off Cape Horn.—Captain F. W. Breton.

Foreign Shells.—Mrs. Tuck.

Two Land Shells.—J. Webster, Hokianga.

Pholas similis, in spirits.—J. Stewart, C.E.

Testacella sp.—Rev. A. G. Purchas.

Specimen of Spirula levata, with outer valves of pedunculated cirr-
pede attached.—Rev. A. G. Purchas.

New Zealand Shells; New Zealand Cirripedes.—T. Kirk, F.L.S.

Chrysalides.—The Hon. Colonel Haultain.

Vegetable Caterpillars.—G. Kirton.

Vegetable Caterpillars.—J. Webster, Hokianga.

Fragment of Mummy Cloth.—J. Short, Mangere.

Specimen of Stains produced by a pigment extracted from the bark
of the Hinau.—L. Nattrass, Nelson.

Tapa Mat.—Miss Brodie.

Two Stone Implements, partly sandworn.—J. Webster, Hokianga.

New Zealand Wood Sections; Dried New Zealand Plants; Dried
British Ferns.—T. Kirk, F.L.S.

British Algae.—H. Arthur.

Two Copper Coins.—Anderson.

One Copper Coin.—G. Von der Heyde.

One Copper Coin; One Medal of the French Republic.—G. Hen-
derson.

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AUCKLAND INSTITUTE.

LIST OF MEMBERS

FOR THE

YEAR ENDING MARCH 31, 1874.



LIFE MEMBER:

Leaf, C.J., F.L.S., S.A., G.S., &c., London.

Aitken, W., Auckland	Clarke, H. T., Tauranga
Aickin, G. Auckland	Cochrane, S., Auckland
Alexander, C., Auckland	Codrington, Rev. R. H., Norfolk Island
Allen, J. E., Auckland	Cook, C. E., Onehunga
Allom, A. J., Shortland	Cowie, The Right Rev. W. G., D.D., Bishop of Auckland
Allwright, H. C.E., Auckland	Cox, Alfred, Hamilton
Anderson, J., Auckland	Cruickshank, D. B., Auckland
Arney, Sir G. A., Knt., Chief Justice of New Zealand	Daldy, W. C., Auckland
Atkin, W., Tamaki	Davy, G. B., Shortland
Atkin, W., Auckland	Dawson, F. W. H., M.D., Auck- land
Baber, J., C.E., Auckland	Day, R., M.D., Auckland
Ball, T., Mongonui	Dickson, C. B., Auckland
Barstow, R. C., R.M., Epsom	Drake, W., Shortland
Bates, Rev. J., Devonport	Dyson, R. W., Auckland
Beere, D. M., Shortland	Earl, W., Remuera
Biss, S.B., Auckland	Edmonstone, G. F., Parnell
Breen, J., C.E., Auckland	Fairburn, J., Parnell
Brett, H., Auckland	Farmer, The Hon. J., M.L.C., Remuera
Bruce, Rev. D., Auckland	Ferguson, His Excellency Sir James, Governor of New Zea- land
Buchanan, Jas., Auckland	Firth, J. C., Auckland
Buchanan, John, Auckland	Fish, T., Auckland
Buckland, W. T., Remuera	Floyd, W. H., Auckland
Buller, Rev. J., Christchurch	Ford, S. H., M.D., Russell
Campbell, H., Auckland	Fox, A., M.R.C.P., Shortland
Campbell, J. L., M.D., Auckland	Fraser, G., Auckland
Cawkwell, W. J., Auckland	Fraser, J. M., Auckland
Chamberlin, The Hon. H., M.L.C., Parnell	George, J., Auckland
Chapman, G. T., Auckland	Gibbons, E., Onehunga
Cheeseman, T. F., F.L.S., Remu- era	
Clark, A., Remuera	
Clark, J. M., Remuera	
Clark, W.H., C.E., Ngaruawahia	

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Gillies, T. B., M.H.R., Auckland
Gittos, B., Auckland
Goldsboro, C.F., M.D., Parnell
Goodall, J., C.E., Epsom
Goodfellow, W., Otara
Gorrie, W., Auckland
Graham, W. K., London
Green, Major, Auckland

Hall, J. W., Grahamstown
Hankie, E.A., London
Hannaford, M., Remuera
Harding, S., Auckland
Haultain, The Hon. Col. T. M.,
Auckland
Hay, D., Parnell
Hay, W., M.H.R., Papakura
Heale, T., Auckland
Heather, A., Auckland
Henderson, J., C.E., Wellington
Henderson, T., jun., Auckland
Hesketh, E., Auckland
Higginson, H.P., C.E., Wellington
Hill, W., jun., Auckland
Hobbs, R., Auckland
Humphreys, W., Auckland
Hunt, R. R., Ngaruawahia
Hunt, W. A., Remuera

Jackson, S., Remuera
Jones, Owen, Auckland
Jones, S., Auckland
Jordan, R. C., Tauranga

Kemp, H. T., Bay of Islands
Kenny, N., Ngaruawahia
Kidd, Rev. R., L.L.D., Auckland
Kinder, Rev. J., D.D., St. John's
College
Kirk, T., F.L.S., Wellington
Kirton, G., Napier
Kissling, G. S., Parnell
Kissling, T., Parnell
Kissling, W. H., Parnell
Knorr, C. B., C.E., Auckland

Lamb, J., Riverhead
Larkworthy, F., London
Lee, W., M.R.C.S.E., Auckland
Lodder, W., Remuera
Lusk, H. H., Auckland
Lyall, J. L., Epsom

MacCormick, J. C., Auckland
McDonald, D. E., Auckland

Macfarlane, J.S., Auckland
Macfarland, R.J., C.E., Grahams-
town
Macffarlane, T. Auckland
Mackay, R., Auckland
Mackechnie, E. A., Auckland
Mackellar, H. S., Wellington
Mackelvie, J. S., Auckland
Maclean, B., Tamaki
Maclean, The Hon. D., Napier
Maclean, The Hon. E., Howick
Macrae, F., Auckland
Mair, Captain G., Tauranga
Mair, H. A., Parnell
Mair, R., Whangarei
Mair, Major W. G., Alexandra
Maning, F. E., Hokianga
Martin, J., Auckland
Mason, J., Parnell
Meinertzhangen, F. M., Napier
Mitford, G. M., Parnell
Morton, H. B., Auckland
Morrin, T., Auckland
Monro, H. A. H., Auckland
Moss, F. H., Auckland
Murdoch, D. L., Epsom

Nathan, L. D., Auckland
Nation, Colonel, Parnell
Nicholson, J. R., M.D., Auck-
land

O'Neill, C., Auckland
Ormond, The Hon. J. D., Napier
O'Rorke, The Hon. G. M., One-
hunga
Owen, G. B., Epsom

Palmer, W. J., Auckland
Peacock, T., Auckland
Pearce, R. J., Auckland
Perkins, E., Auckland
Philips, P. A., Auckland
Philips, C., Auckland
Poilen, The Hon. D., M.D., Whau
Pond, J. A., Auckland
Preece, J. W., Auckland
Purchas, Rev. A. G., M.R.C.S.E.,
Onehunga

Rapson, S., Kaukapakapa
Rayner, G., Ngarnawahia
Richmond, J., Auckland
Roberton, J., Auckland
Roberts, W. C., Hokitika
Robertson, J., Mangere
Russell, T., Auckland

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Scott, W. Paterangi
Sheath, A., Auckland
Sheehan, J., Auckland
Sheppard, A. M., Otahuhu
Shera, J. M., Auckland
Sinclair, A., Auckland
Slatter, J., Auckland
Slowman, J. F., Auckland
Smales, Rev. G., East Tamaki
Smart, J., Auckland
Smith, J. P., Auckland
Spencer, T., Grahamstown
Spencer, W. J., M.D., Napier
Steel, Capt., Hamilton
Stewart, J., C.E., Auckland
Stewart, T. M., Melbourne
Stockwell, R., M.D., Auckland
Stone, C. J., Auckland

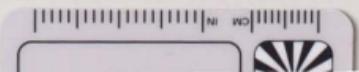
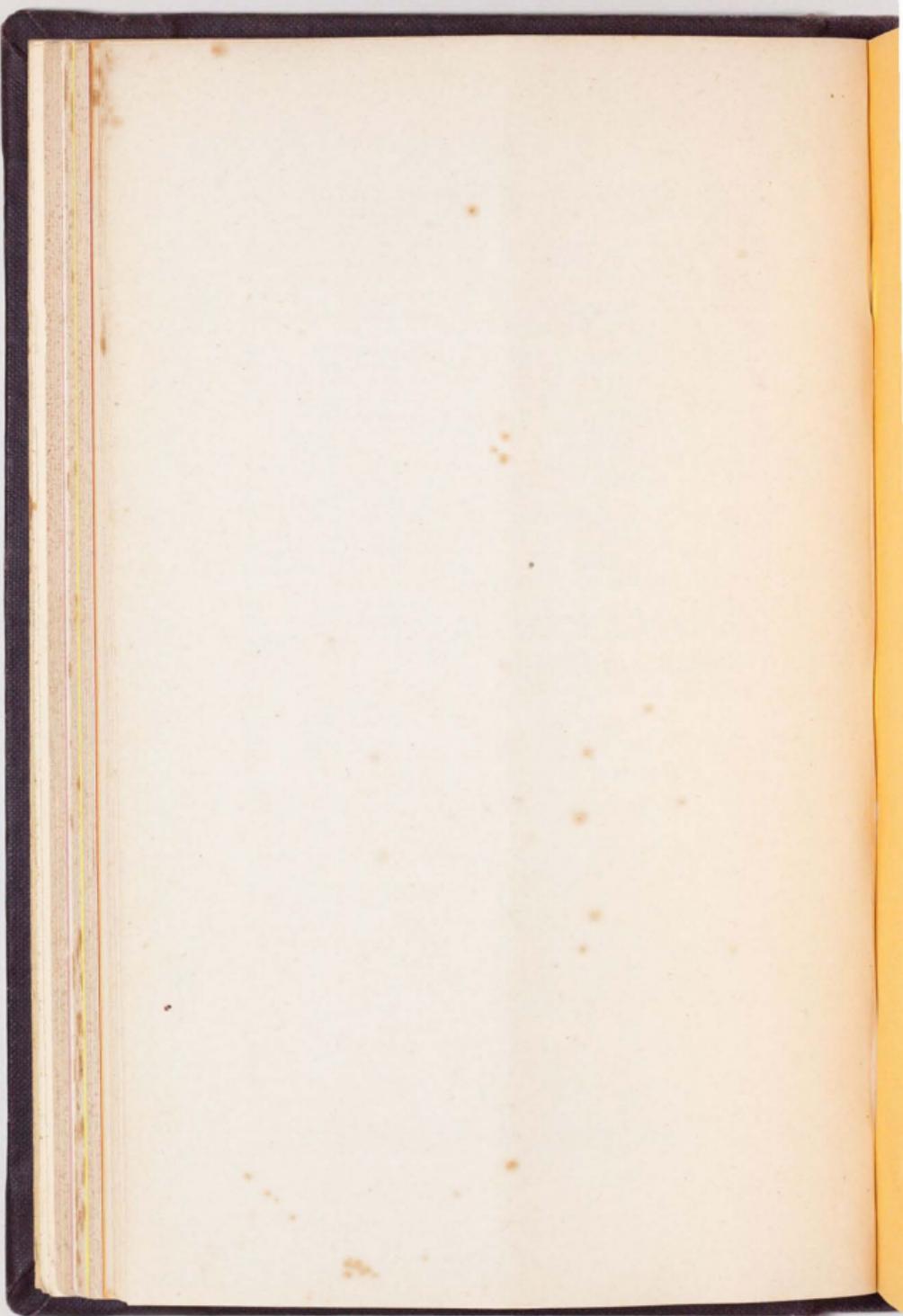
Taylor, The Hon. C. J. Tamaki
Thorne, G., Jun., Auckland
Thomas, E., Auckland
Tinne, T. F., Auckland
Tothill, C., Auckland

Vogel, The Hon. J., Wellington
Von der Heyde, G., Auckland

Waddington, E., M. D., Alexandra

Wallace, Jno., Flat Bush.
Wardrop, A., Auckland.
Ware, W., Auckland.
Wark, J. N., Sydney.
Watt, J., Auckland.
Wayland, J. M., Onehunga.
Waymouth, J., Auckland.
Wayte, E., Auckland.
Webster, J., Hokianga.
Weetman, S. Mongom.
Whitaker, F., Auckland.
White, T. L., Auckland.
Whitson, R. W., Auckland.
Will, W., Auckland.
Williams, H., Bay of Islands.
Williams, H. M., Auckland.
Williams, The Ven. Archdeacon W. L., Poverty Bay.
Williamson, The Hon. Jas., M.L.C., Auckland.
Williamson, His Honor John, Superintendent of the Province of Auckland.
Wilson, Major J., Cambridge.
Wilson, J. L., Whangarei.
Wilson, W. C., Auckland.
Wright, F. W., L.M.B., Toronto, Auckland.

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